Air Education and Training Command's

TORCH

March 2001

Flying under Stress

When a pilot is torn between a family hardship and flying a multi-million-dollar jet, he has to make some tough choices.

Page 18

Also:

Road Rash

Skin and flesh vs. asphalt? Asphalt wins every time.

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Air Education and Training Command's
TORCH
Symbolic of Education and Learning

About the Cover

When his son was born three months premature and had to be hooked up to a ventilator to breath, flying under stress became a real problem for a pilot at Sheppard Air Force Base, Texas. Find out how he handled it, starting on page 18. Pilot photo by Steve Thurow. Baby photo courtesy of Capt. Brian Gienapp. Digital composite by Sammie W. King.

Back Cover photo by Steve Thurow.

Departments

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From the DIRECTOR

By Col. **MICHAEL P. ERDLE,** *AETC Director of Safety*

'Stressing' the Problem

Dealing with stress starts at the top

In this month's Torch, you'll read about an AT-38 pilot who took himself off the flying schedule to deal with his son's medical problems. The stress of worrying about his son's failing health caused him to lose focus in the cockpit. Rather than risk a flying mishap, he took a couple of days to regroup.

Did he do the right thing? You bet!

Would you have made the same call? I hope so. But many do not.

Many airmen push away dealing with stress. They're afraid that admitting they are stressed will be perceived as weakness. That's where our leaders — supervisors and commanders — have to step in. We need to reinforce that it's not weak to deal with stress or to ask for help when necessary. Help is there. We staff for it. We anticipate it. An individual who needs assistance but refuses to seek it is an accident waiting to happen and may be more of a liability than an asset to our mission.

There's strong evidence that unchecked stress plays a major role in increased mishaps on and off the job. It also affects changes in behavior, such as increasing substance abuse, including alcoholism, and in the most extreme cases, suicide.

Stress isn't something that's just limited to the foxhole. Deployments, military operations and training are high-stress propositions, regardless of whether service members are ever under hostile fire. Significant events in our lives, both good and bad, cause stress. Among the highest stress-producing events are weddings, divorces, the death of a family member, moving, changing jobs, illness — the list goes on. No one is immune to stress.

Today's armed forces face a full spectrum of 21st century global challenges — nontraditional conflicts, frequent deployments, rapid advances in technology, high-paced realistic training environments, and a smaller force doing more with less. All this, combined with modern, fast-paced lifestyles at home and the demands of raising a family, cause significant strain on our members.

Stress-related issues can impact readiness, health and safety, and require education and training in effectively dealing with these problems. Ultimately, it's the commander who must provide the leadership and guidance to encourage their people to recognize and manage their stress before it becomes a problem, to include seeking assistance through the variety of services available within our strong support network.

Stress isn't something that's just limited to the foxhole. Deployments, military operations and training are high-stress propositions, regardless of whether service members are ever under hostile fire.

In the Operational Risk Management formula, we've already identified stress as a hazard, and everyone has stress in their lives. It's up to you to go through the rest of the ORM steps and to ultimately implement risk controls. Stress can't be ignored.

It's 'Cool' to Learn

Thank you for the nice 2001 calendar edition of Torch. I'm an operations officer for an aviation unit and found the picture titled "Cool School" (under the month of December) interesting. How do I get more information on training opportunities?

Army Capt. Kit Jones
Via e-mail

The "Cool School," or Arctic Survival School, is at Eielson Air Force Base, Alaska. Contact Senior Master Sgt. Maureen Young, the school's superintendent, at DSN 317-377-1763 or commercially at (907) 377-1763. You also can find out more information on the Cool School in a feature published in the January 2001 issue of Torch, page 8.

On Track

Regarding your January 2001 cover story "Racing into the New Year": Great article! The Wood Brothers (owners of the Air Force-sponsored racecar driven by NASCAR Winston Cup driver Elliott Sadler and featured in Torch) will be at my base soon for an orientation flight. I'll give them a copy of your magazine.

Senior Master Sgt. Randy W. Fuller
Robins Air Force Base, Ga.

20 Years Later...

After reading through the calendar issue of Torch Magazine, I noticed that there was an error. On June 18, one of your historical facts lists Sally Ride as the first U.S. woman in space, and it indicates the year as 1963. Although she was indeed the first U.S. woman in space, it wasn't in 1963. It was in 1983 aboard the Challenger (STS-7). Her next flight would be again with the Challenger (STS41-G) for eight days.

Pete Watson
Goodfellow Air Force Base, Texas

You're right! We typed in the date wrong and didn't catch the typo. Thanks for setting us straight.

Hairdos ... and don'ts

In your 2001 calendar issue under the month of February, the crew chief you have pictured is violating regulations. She shouldn't be wearing a barrette in her hair, especially while working on an aircraft or anywhere else on the flight line.

It's a FOD (foreign object damage) hazard and could cause damage to a multi-million-dollar jet if it became dislodged and was sucked into an engine. It's a no-no on the flight line.

Master Sgt. Catherine Hall
Randolph Air Force Base, Texas

Good point! Thanks for helping us identify another safety hazard.

Wrong Location

I have a correction to your November 2000 article "Court Rat," page 12.

Senior Airman Rob DeJesus is a member of the Tucson Air National Guard, 162nd Fighter Wing at Tucson International Airport. Your article stated he was at Luke Air Force Base, Ariz.

Capt. Ken Gavre
Tucson Air National Guard

Thanks for the correction.

Pass It On

The 2001 Torch calendar is very useful. I use the safety information as part of my safety messages, and the military history is great. Each month we have to send a goal letter to all recruiters. I use the military history, safety and monthly awareness in each letter I send out. It has been a great resource.

Joy Osborne
Goose Creek, S.C.

LETTERS TO TORCH

Have a comment or complaint? Letters to Torch may be sent via e-mail to: torch.magazine@randolph.af.mil. Or mail to Torch Editor, HQ AETC/SEOM, 244 F Street East, Suite 1, Randolph AFB TX, 78150-4328, or fax to DSN 487-6982 or commercially to (210) 652-6982. For customer service, call DSN 487-5818, or commercially at (210) 652-5818. Please include your name, address and phone number.

I Got the Spins

The article "Spin Master" in the September 2000 issue of Torch intrigued me, as it brought back a couple of personal experiences. I was a T-37 instructor pilot for more than six years at three bases. While at Laredo Air Force Base, Texas, I was flying with a 6-foot-3, 200-plus-pound student, just starting spin training. I had demonstrated a spin, and now it was his turn. He entered the spin and was following procedures, but when it came time for the recovery, he froze on the controls. I yelled, "I've got the controls!" But it was in vain. He was out of it, and the stick was "frozen in concrete." I quickly reached over with my left hand and crimped his oxygen hose. I heard this huge sucking sound and gasping for air over the intercom. On his second attempted inhale, he let go of the controls (breathing became his primary concern). At that instant I took the controls and recovered.

In another incident at Laredo, I was on short final to the auxiliary field with an Iranian student. He was slightly low on final, and his airspeed was decreasing with the power set to low. He didn't respond to my verbal commands and froze on the controls. I yelled, "I've got the controls!" Again, no results. We were very short final and very close to the ground. The airspeed was becoming dangerously low, and in another second or two, we would stall at approximately 200 feet above ground level. He wouldn't let go of the controls. With my left hand and adrenaline flowing, I chopped his right arm, knocking it off the stick. I then gained control and took the aircraft around. The student's arm was badly bruised for a week (I thought I had broken it at first).

In both situations it was a side-by-side primary trainer that saved the day. I could have ejected out of the spin by myself, but the short final situation would have taken us both out. Needless to say, I feel there's no place for a tandem primary trainer in the Air Force inventory.

Donald W. Payne
Randolph Air Force Base, Texas

by Tech. Sgt. Lance Cheung

Driving Him Mad

Near to the door he paused to stand, as he took his class ring off her hand.

All who were watching did not speak, as a silent tear ran down his cheek.

And through his mind the memories ran, of the moments they walked in the sand hand in hand.

But now her eyes were so terribly cold, for he would never again have her to hold.

They watched in silence as he bent near, and whispered the words, "I love you," in her ear.

He touched her face and started to cry, as he put on his ring and wanted to die.

And just then the wind began to blow, as they lowered her casket into the snow.

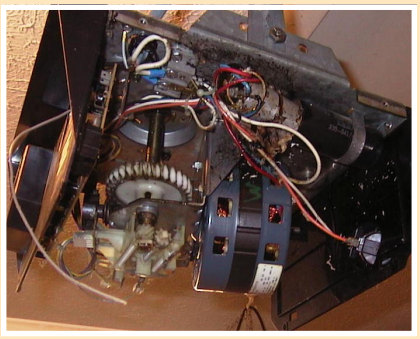
This is what happens to man alive, when friends let friends drink and drive.

Author Unknown
Forwarded by
David L. Zipf
Keesler Air Force Base, Miss.

Garage Door Opener Explodes

TYNDALL AIR FORCE BASE, Fla. — When I entered my garage the other day, I noticed that the garage door opener was making an awful grinding noise. The noise was only present when the door was closing. So being the adventurous type, I decided to fix the noisy little devil. I mean, how hard could it be to apply a little WD-40?

I lubricated the external drive gear and the track, but the noise still persisted. So I decided that this problem was going to require a bit of work on the inside of the opener. I dragged my stepladder out and removed the cover. Upon a quick visual inspection, I noticed that the gears inside were in desperate need of some lubrication.



In an attempt to save time, I had removed one of the remote garage door openers from my car. So there I am with a can of WD-40 in my left hand and the garage door opener in my right. I sprayed a little and cycled the garage door to see if the grinding noise was still present. Well, after about a minute or two, the noise disappeared! I was so proud. I really wasn't looking forward to replacing the garage door unit. This was an expense that I didn't need while still recovering from Christmas.

I decided to let the gears dry off, and then I would come back later to apply some white lithium grease. I pushed the button to close the door while the gears were drying out. I was still on the stepladder with my face approximately two feet away from the garage door opener when I pressed the button. ...

Bang! And a bright flash of light.

My next conscious thought was, "How did I get off the step ladder? How did I get over to the washing machine, which is six feet away from the ladder? And above all, why is my $%&#$#$@* garage filling with white smoke?"

I quickly grabbed the fire extinguisher and turned off the circuit breaker (which to my amazement hadn't popped). As the smoke dissipated, my wife slowly opened the garage door to see what was left of her husband.

I was well aware that WD-40 is flammable (prior incident in my youth). That's why I was wearing my safety glasses during this whole procedure. Just by luck, the force of the blast went to my left. If it had been pointed at my face, I would have had a very unhappy weekend.

I was careful not to spray the lubricant on any of the electrical components; even so the flammable WD-40 still may have caused the mishap. More than likely, the explosion happened either because of a vapor buildup inside the chassis or the overheating of the capacitor. If you ever find yourself in a similar scenario, let the vapors dissipate before applying electrical power.

Also, I had a fire extinguisher, and I knew where the circuit breaker was located. This allowed me to quickly cut power from the garage door opener, which was smoking until I removed electrical power.

P.S. I now know how to replace a garage door opener if any one needs any help in the future!

— Staff Sgt. David Whiting
Detachment 1, 85th Test and Evaluation Squadron

Surviving a Rollover

GOODFELLOW AIR FORCE BASE, Texas — On New Year's Eve, I was returning from leave and traveling on I-35 on what I thought was just slush and water when I hit what was apparently ice instead. This caused my wife and I to slide off of the interstate and roll twice, coming to rest with the car upside down. Luckily we were both suspended from our seats, held in by our seat belts. If it weren't for seat belts, we wouldn't have walked away from this with just a few minor scratches.

— Capt. Michael Waddle
315th Training Squadron

by Steve Thurow

A former Olympian in skeet shooting, Air Force reservist Maj. Bill Roy is a disciple of the "Ten Commandments" of gun safety.

photos by Tech. Sgt. Lance Cheung

The 'Ten Commandments' of Gun Safety

MISAWA AIR BASE, Japan — Target shooting is one of the safest sports around, and it all goes back to the safety techniques we were taught as beginners: the "Ten Commandments" of Gun Safety. It's your responsibility to practice these techniques, both on the range and off.

1) Always keep the gun pointed in a safe direction. Know where the gun is pointed at all times. Imagining the gun as a 10-foot pole is a good visual aid and will help you get used to raising the muzzle away from people or things you don't want in the line of fire. Sometimes, pointing the muzzle up isn't a good idea, depending on your surroundings.

2) Always keep your finger off the trigger until you're ready to shoot. This is a no-brainer. The trigger is designed to fire the gun, so keep your finger away until you are pointing the gun at its intended target.

3) Always keep the gun unloaded until ready to use. We've all heard the stories of somebody shooting himself in the foot or somewhere worse, while cleaning his gun. Not knowing the gun was loaded is no excuse for an accident. Never assume anything when it comes to gun safety. Always check the magazine and the chamber before handling a gun or before handing over the gun.

4) Be sure the gun is safe to operate. Have older guns checked by a professional. If there's a question about the serviceability of a firearm, don't chance it.

5) Know how to use the gun safely. Ask your firearm dealer to spend a few minutes explaining how the safeties work and how to safely load and unload the ammunition. Read the instruction manual before using the gun for the first time. If you don't have a manual, write the manufacturer. The wrong time to learn about your gun's safeties is when you are using it.

6) Use only the correct ammunition for the gun. Certain ammunition can be chambered and fired in guns they weren't designed for, and these can have deadly results. Ask a professional if you're uncertain.

7) Know your target and what is beyond. The range of most ammunition is more than a mile, and large caliber rifle cartridges can travel several miles. With this in mind, you can't just set-up some cans on the edge of a forest. You must know what's beyond those trees.

8) Wear eye and ear protection. In the military, we're used to wearing the appropriate personal protective equipment. This practice should always be followed off duty as well.

9) Never use alcohol or drugs before or while shooting. We all know that machinery shouldn't be used while under the influence of alcohol or drugs. This should obviously include firearms because of their lethality.

10) Store guns unloaded and not accessible to unauthorized persons. This is critical for homes with small children. Small children and people unfamiliar with firearms are often the most curious. They need to know that they should only handle the guns while in your supervision.

Take them shooting with you, and show them these safety techniques. A child who understands the dangers of guns is less likely to play with a real firearm. Always be certain your guns are locked up, out of sight or disabled when not in use.

When it comes to guns, these 10 practices are only the beginning of what you need to do to keep your family safe from firearm accidents. Different guns and different shooting situations require additional safety precautions. You're ultimately responsible for the safety of your family and yourself. Trust your instincts. If it doesn't seem safe, then it probably isn't. Use the Operational Risk Management process to think it though. Like the old saying, "Better safe than sorry."

— Tech. Sgt. Scott Evans
372d Training Squadron, Detachment 15 OL-A

A Not-so-special Delivery

Riding an inner tube pulled by a car along a mountain road, a 20-year-old airman first class scooted along at about 15 mph. The vehicle driver steered to the left to "whip" the inner tube to the right side of the road.

Unfortunately, the "whipping" action sent the airman barreling into a metal mailbox post. He sustained a compound fracture of the lower left leg, and spent six days in the hospital and 22 days on quarters. It cost $11,046 to put his injured limb back together again. No word on how the mailbox fared.

A Rough Landing

A 38-year-old staff sergeant was snow sledding, when he hit a natural ramp on the hillside and went airborne. When he landed, he fell back and his back struck hard against his sled. He immediately went to the hospital where he was diagnosed with a broken bone in his back. He spent two days in the hospital and 17 days on quarters. At an injury cost of more than $7,300, maybe he'd be better off leaving "takeoffs" and "landings" to pilots.

Skunk Causes Fatal Car Wreck

After eating out at a restaurant, a 21-year-old senior airman left with two civilian female friends. One of the women was driving 75 mph in a 55 mph zone on an infrequently used road.

Suddenly, a skunk darted out in front of the vehicle.

Startled, the driver swerved to avoid hitting the skunk and lost control of the car. She attempted to regain control but overcorrected, causing the vehicle to skid sideways and leave the paved surface. Once the car came in contact with the soft bank, it rolled three times, finally coming to rest on its roof.

As the car rolled, the driver's head came in contact with the ground. The airman passenger wasn't wearing his seat belt and was ejected from the rear window, landing about three feet from the vehicle's resting-place. While upside down, the third passenger managed to unbuckle her seat belt, get out of the car and run about a half mile to a major highway for assistance. Medics pronounced both the airman and the female driver dead at the scene.

Injuries Soar as Scooter Sales Skyrocket

WASHINGTON, D.C. (AETCNS) — Nearly 5,000 scooters were sold in 2000, an increase of virtually zero from the year before. The U.S. Consumer Product Safety Commission reported that emergency room-treated injuries related to popular lightweight scooters increased 700 percent over a five-month period last year.

Commission data shows there were more than 4,000 scooter-related injuries treated in hospital emergency rooms in one month alone. There were more than 9,400 emergency room-treated injuries reported over a nine-month period. Nearly 90 percent of the injuries were to children under 15.

The safety commission recommends that riders, especially children, wear proper safety gear including a helmet and knee and elbow pads to help prevent injuries. Safety officials estimate that more than 60 percent of injuries could be prevented or reduced in severity if protective gear had been worn.

"These scooters are the 'in' thing with kids," said CPSC Chairman Ann Brown. "Unfortunately, many kids are ending up in hospital emergency rooms instead of classrooms."

The scooters, which first went on the market in the United States last year, are new versions of the foot-propelled scooters first popular in the 1950s. They are made of lightweight metal such as aluminum and have small low-friction wheels similar to those on in-line skates. They usually cost between $80 and $120 and typically weigh less than 10 pounds. They can be folded for easy portability.

Most injuries resulted when riders fell from the scooter. Fractures and dislocations accounted for 29 percent of the injuries. Most of the fractures and dislocations were to arms and hands.

The best investment against injury is protective gear that costs less than $35, officials said.

by Master Sgt. Dave Nolan

***Two people died** last year in scooter mishaps. An adult fell and struck his head while showing his daughter how to ride, and a car struck a 6-year-old boy.*

Recommended Safety Guidelines

- Wear a helmet that meets CPSC's standard, along with knee and elbow pads.
- Ride the scooters on smooth, paved surfaces without any traffic. Avoid streets, or surfaces with water, sand, gravel or dirt.
- Don't ride the scooter at night.

To report a dangerous product or a product-related injury, call CPSC's hotline at (800) 638-2772 or visit its Web site at **http://www.cpsc.gov/talk.html.**

— Courtesy U.S. Consumer Product Safety Commission

Scooter Recalls

WASHINGTON, D.C. (AETCNS) — In cooperation with the U.S. Consumer Product Safety Commission, Kent International Inc., of Parsippany, N.J.; and Kash 'N Gold Ltd., of Ronkonkoma, N.Y., are recalling nearly 100,000 scooters.

Kent Kickin' Mini-Scooters

Kent is recalling about 90,000 Kickin' Mini-Scooters. The scooter handles can unexpectedly come out of the steering column if the clamp holding them in isn't tight, causing the rider to lose control.

Kent has received four reports of the handles coming out, resulting in four children suffering injuries, including broken arms, a broken wrist, bruises and a cracked tooth.

Call Kent International to receive a free replacement handlebar with pins to secure the handlebars. For more information, call Kent International at (800) 451-KENT (5368) between 8 a.m. and 5 p.m. EST Monday through Friday.

Kash 'N Gold Racer Scooters

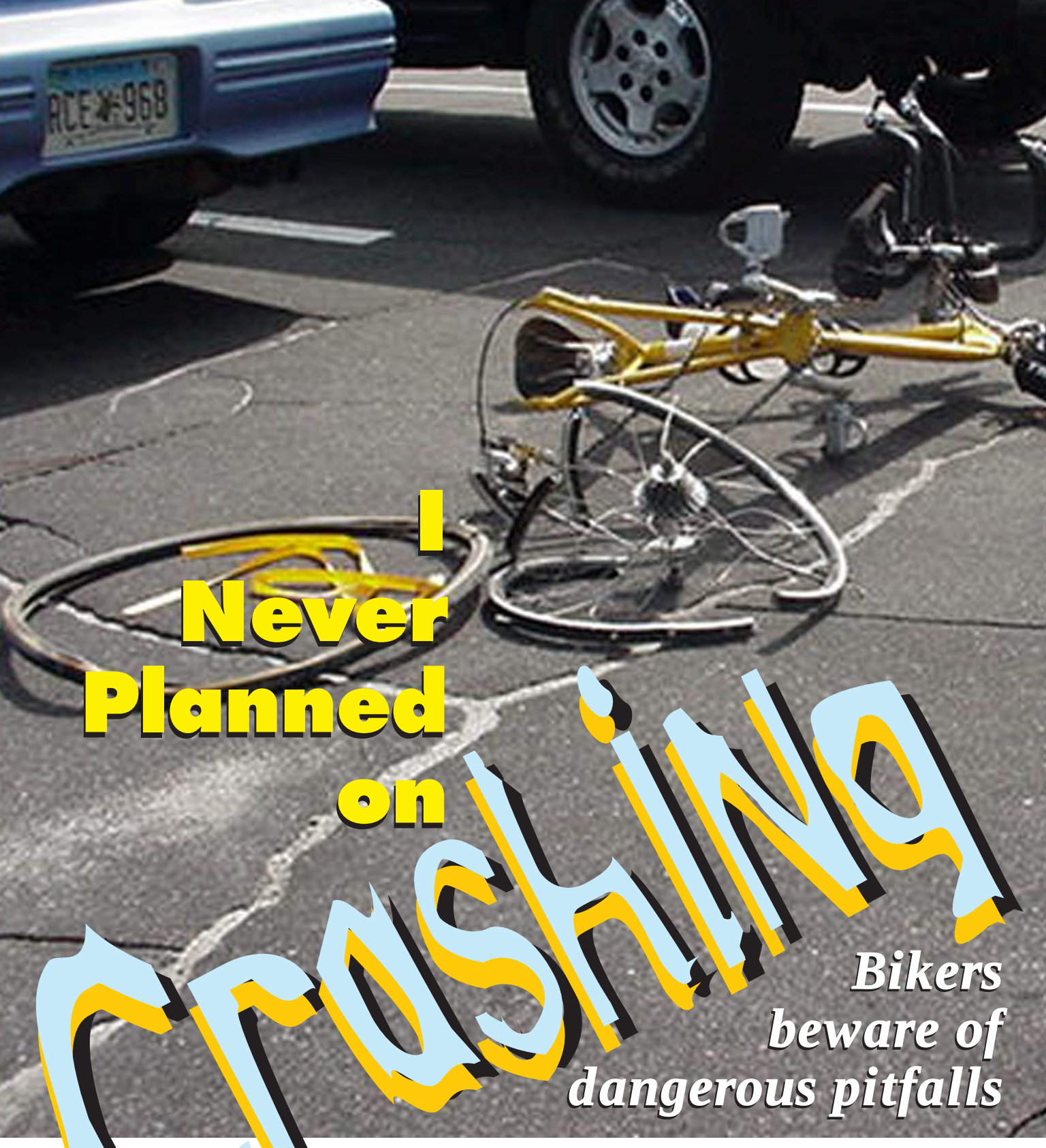
Kash 'N Gold is recalling about 7,500 Racer X20TM model scooters because the plastic "T" joint between the handlebars can break.

Kash 'N Gold has received two reports of the joint breaking, resulting in two injuries — a bump on the head and a chest bruise.

Consumers should stop riding these scooters immediately and return them to the store where purchased for a refund or a new scooter with a metal "T" joint.

For more information, call Kash 'N Gold at (800) 354-8785 between 10 a.m. and 4 p.m. EST Monday through Friday.

— Courtesy U.S. Consumer Product Safety Commission



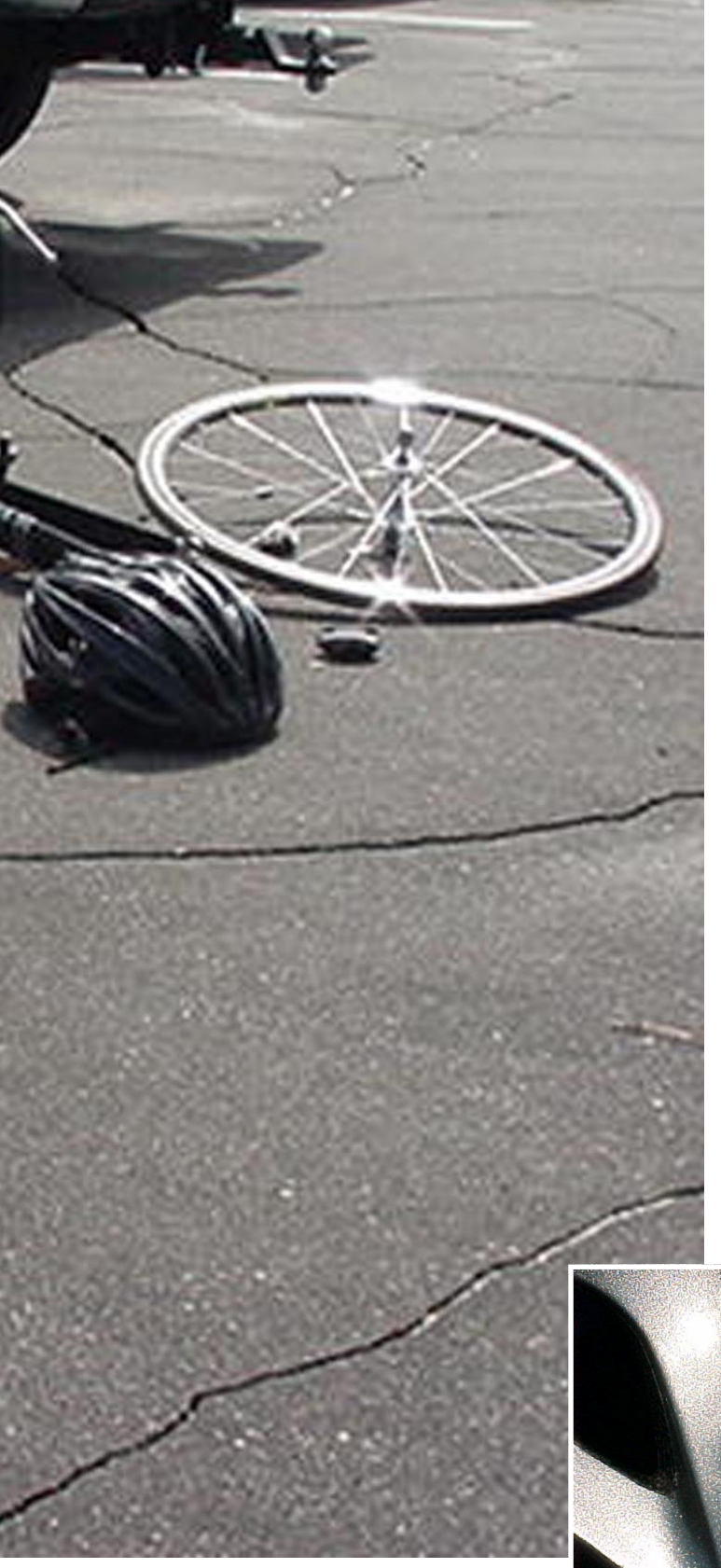
I Never Planned on Crashing

Bikers beware of dangerous pitfalls

By Tech. Sgt. **MARK D. ROYAL**
Photos by Staff Sgt. **JAMES WOMACK**

Labor Day weekend rapidly approached, and Senior Airman Joseph Heflin looked forward to the three-day weekend with great anticipation. His best friend and his fiancè were flying down to see him.

Heflin had been at Sheppard Air Force Base, Texas, for nearly six weeks, attending a Turbo Prop Apprentice Course.



As a member of the 167th Air National Guard Unit from West Virginia, attending technical training school in Texas was a big change for Heflin. So he flew to Sheppard and later had his Cannondale mountain bike shipped to him.

Heflin had been mountain biking for about three years and rated his experience level as average.

"Since I didn't think there would be any off-road trails in the Sheppard area, I left my street slicks [tires intended for street use] on my bike and soon became a 'speed junkie' on the asphalt," Heflin said.

By the time Thursday evening (August 31) arrived, Heflin was feeling great.

"I headed out with another avid mountain biker whom I met while at Sheppard," he said. "My feet hit the pedals, and we were off!"

As always, Heflin wore his Giro bicycle helmet as he set out.

It was a three-mile trip to the trail, and the trail itself was 12 miles. Coming from up North, Heflin wasn't accustomed to riding in the intense Texas heat, but he said he soon adapted.

"As we started our ride, my mind was free and clear," the airman said.

Heflin was extremely cautious in the beginning, because he hadn't ridden off-road for so long.

"As the ride progressed, I began to feel more relaxed and felt comfortable riding a little harder," he said. "We were almost at the point of starting the three-mile road ride back home."

He didn't make it that far.

"I was in the front and wasn't wasting any time in trying to finish the trail and get back on the asphalt," Heflin said. He was cruising along at speeds in the low-to-mid 20s (fast for a mountain bike), when he suddenly came flying toward a ditch. "The ditch grabbed my attention, and I focused on the ground ... which is exactly why I never saw the bridge that crossed over the trail. I remember hearing a bang when I plowed headfirst into the bridge."

Fortunately, Heflin was wearing a helmet, and it did its job. The impact with the bridge drove a hole through his helmet, but it left his head intact. The next thing Heflin remembers is lying on the ground with blood pouring from his nose and mouth, while his friend called for an ambulance.

"Normally after a slight accident, I jump up, get back on the bike and ride," the airman said, "but at this point I had no ambition to move, much less get up."

Heflin couldn't remember ever being in such pain.

"It felt like my face had been ripped off," he said.

After arriving at the emergency room, Heflin discovered he had indeed suffered serious injuries to his face.

"All of my teeth were loose, my nose was broken, and my lower lip was ripped away from the gums clear to the bone and tore open on the outside of my mouth as well," he said. "I ended up getting 20 stitches to reattach my lip."

In addition, Heflin had managed to bite two holes through his tongue when he was thrown from his bike.

Although Heflin was seriously injured, he was lucky to be alive.

"All of the physicians at the hospital emergency room

Surviving a bike crash *may not be as easy as some might think. More than 900 people die in bike crashes each year.*

After plowing into this bridge *while riding his mountain bike, Senior Airman Joseph Heflin was glad it was his helmet that got an extra hole in it and not his head.*

Saving Your Head

By Master. Sgt. **GARY SHARP**

What began as a normal bicycle ride a little more than a year ago woke me up to the reality of how easy it is to get injured or to become another fatality in a mishap.

I was riding my bike on the base jogging track going around the runway when I encountered heavy sea fog. I continued to ride and had to remove my glasses, which were fogging up on me.

I had 5 feet of visibility and was riding nearly 15 mph.

What I couldn't see was a ditch running parallel in front of me. I hit it full tilt. Thanks to my helmet, I came away with only a bruised neck. My helmet was cracked up in several places but it served its purpose — to protect my head.

This incident prompted me to do a little research on choosing an approved safety helmet.

I found out that all helmets manufactured after March 1999 must meet the Consumer Product Safety Commission standards. However, many older helmets will be sold throughout the year without meeting this standard. The other standard I found was the American Society for Testing and Material, carried by most military exchanges.

All helmets are legally required to have a certification sticker. An independent organization called the Safety Equipment Institute certifies standards.

After you have chosen your helmet (see "Choosing a Helmet" at right), you need to ensure you are wearing it correctly. Ensuring it fits will entail putting it on forward, not backward, and adjusting straps and padding.

On some helmets it's easy to tell the front from the back because they have stickers labeled "Front" on them. Others will have the brand name on them, which is normally at the front. Virtually all helmets have the nape straps anchored near the rear. The elongated "aero" style helmets are made with the longer part toward the rear.

Adjusting straps and adding padding is necessary for ensuring that the helmet fits securely to your head. If you have a large head (size 8 and up), then you need to special order one. Don't remove all the padding to make it fit. Consumer reports have shown that helmets fitted securely can prevent up to 85 percent of cyclists' injuries.

When should you replace a helmet? Most people are aware that after any crash, whether you see cracks or not,

Choosing a Helmet

■ When choosing a helmet, select one that fits your head well and is round and smooth on the outside. They must have at least an American Society for Testing and Material or Consumer Product Safety Commission standard sticker inside.

■ Cool helmets: With marketing hype aside; ventilation depends on the size of the front vents.

■ The cost: How much will you pay for it? Discount stores have round and smooth helmets meeting ASTM and CPSC standards from $8 to $20. Some local bike shop will have helmets from $30 to $125. But, remember, any helmet without a sticker saying it meets the CPSC standard, you should disregard for safety reasons.

■ Kid's helmets: Kid's sizes, range from one to five, and there are none for a very young infant.

and the medical clinic on base assured me that if I hadn't been wearing my helmet, I'd be dead," the airman said.

Because Heflin wasn't familiar with the trail, he shouldn't have been acting as the lead biker nor riding at such a high rate of speed, according to base safety officials. Proper Operational Risk Management procedures should have been applied to this situation. The risks should have been identified and assessed ahead of time. Heflin was, however, wearing a helmet, and the use of proper safety equipment undoubtedly saved his life, safety officials said.

Heflin's helmet was destroyed by the impact. A hole in the helmet shows where his head struck the bridge. When base safety officials inspected the area after the accident, they observed a stud underneath the bridge that appeared to match the hole in Heflin's helmet, which was roughly the diameter of a finger and three-fourths of an inch deep.

Heflin had purchased his helmet for $85, and he recently paid $110 to replace it.

"Although some complain about the price of helmets, to me, it's well worth it," he said. "Some people don't wear helmets, and when they are questioned about it, their response is, 'I don't plan on crashing.' Well, I never planned on crashing either."

Sergeant Royal is the safety noncommissioned officer for the 361st Training Squadron at Sheppard AFB. Sergeant Womack is with the 82nd Training Wing safety office.

Grim Statistics

The statistics on biking accidents are grim, but they also prove that helmets save lives. According to the National Highway Traffic Safety Administration, 761 bicyclists died in traffic-related accidents in 1998 and more than 80 percent of bicycle-related deaths were male cyclists. However, 98 percent of bicyclists killed reportedly weren't wearing helmets.

Studies on the effectiveness of bicycle helmets in preventing serious head injuries (which account for more than 60 percent of bike-related deaths) are compelling. These studies show that helmets can reduce the risk of head injury by as much as 85 percent and the risk of brain injury by as much as 88 percent.

Helmets manufactured after 1995 must meet or exceed Consumer Products Safety Commission guidelines. Snell standards (Snell Foundation is a non-profit organization) are even more stringent, exceeding those set by the safety commission and the American National Standards Institute. Tips on purchasing a helmet, as well as a list of certified helmets, can be found at **http://www.smf.org/cert.html**. Helmets do save lives.

– Tech. Sgt. Mark Royal
Sheppard Air Force Base, Texas

you should replace it. This is because the foam of a helmet is made for a one-time use. Once a helmet has been in a crash, it's no longer as protective as it once was, even if it still looks intact. Even if it hasn't been in a mishap, if you can see marks on it or notice the foam is crushed, replace it.

Also replace your helmet if it was made before 1984 or if the outside is made of foam/cloth instead of plastic. Additionally, you should replace it if it simply doesn't fit your head securely.

Here are some statistics from the safety commission on bicycle helmet usage:

■ Bicycle helmet usage has increased from 18 percent in 1991 to 50 percent in 1998.

■ Bicycle related crashes kill more than 900 riders every year and send about half a million to hospital emergency rooms with injuries.

■ Wearing a helmet can reduce the risk of head injuries by 85 percent.

■ Of the cyclists who reported wearing a helmet, 98 percent said they wore a helmet for safety reasons, 70 percent said it was because of their spouse or a parent who insisted on it, and 44 percent said that it was required by law.

■ Sixty-nine percent of children under the age of 16 use them.

■ Thirty-eight percent of adult riders use them.

Are you one of the adults who rides a bike without a helmet? Two percent of motor vehicle deaths are bicyclists. Among the majority of those killed, the most serious injuries are to the head. No state has a bicycle helmet law applying to all riders. Local ordinances in a few states and military bases do require all bicyclists to wear helmets, and 15 states have helmet laws applying to young bicyclists.

Non-helmet riders are 14 times more likely to be involved in a fatal crash. Males account for nearly 85 percent of bicycle-related deaths and 70 percent of nonfatal injuries.

We also must lower the risk for children. They will need more education and training, such as bicycle safety videos, flags, vests and bike helmets.

Remember your helmet is valuable apparel as well as a safety appliance. It can save your head — just like it did mine.

Sergeant Sharpe is with the 372nd Training Squadron, Detachment 15 OL-A, Misawa Air Base, Japan

Road Rash

Skin and flesh vs. asphalt? Asphalt wins every time

By Capt. **Doug Paterson**
Photos by **Steve Thurow**

I suppose I shouldn't complain after essentially getting up and walking away from a 60 mph Harley motorcycle collision with nothing worse than a broken wrist. ... Well, OK, I didn't exactly walk away. I rode away in an ambulance wearing a neck brace and strapped on a backboard. Still, I considered myself lucky.

Short version: I was passing; she turned left; physical law prohibited two masses from occupying the same space at the same time.

Longer version: It was a chilly Sunday morning last spring. It warmed up throughout the day, but it was pretty windy — something you learn to deal with in Wichita, Kan. There wasn't a cloud in the sky, and it was an all-around gorgeous day.

Eleven of us from the local Harley Owners Group chapter set out going "that-a-way." We ended up in an Oklahoma town for lunch, where we all enjoyed some of the best barbecue anyone remembered. By 6:30 p.m., we were on the final leg of the trip, having just reached about 300 miles for the day, with about 25 miles to go to Wichita.

I split off to head home on my own rather than have to fight traffic through town, as well as to enjoy being alone for a while.

Not more than 10 minutes later, I was leaving Belle Plaine, Kan., on highway K-55. I saw a car a short distance in front of me, heading the same direction, and I was closing. As I approached, everything appeared safe to pass, so I started to do so. I never saw brake lights or signal lights, much less the intersection. The car started to turn left into the lane I was now occupying.

With visions of T-bones — slang term for a motorcycle making a broadside collision with a car — dancing through my head, I swerved right to go behind it, applying every bit of my limited riding experience (one year, 8,000 miles). Even with my limited training — I attended the basic motorcycle safety class one week to the day before the accident — I didn't panic.

Unfortunately, at this very moment the driver finally saw me and swerved right, too. So much for that bright idea. I started to swerve left.

Time to Panic

As it became apparent that I probably wouldn't make it, my brain decided now would be a real good time to panic, and I did so with gusto.

I started climbing on the brakes to lay the bike down. The rear wheel locked immediately and began sliding forward to my left. I was just starting to go down when my right handlebar — now turned almost to the stop to the left — hit the left rear taillight of the car.

A 'Crash' Course

What did Capt. Doug Paterson learn from crashing his Harley motorcycle?

■ "Expect the unexpected" should be less a clichè and more a mantra while riding. I think I may have subconsciously made up my mind to pass the car as I closed behind it well before actually beginning the maneuver, and it contributed to a false sense of security. In any case, with the benefit of hindsight, a bit more healthy paranoia on my part would certainly have come in handy. In this specific case, had I delayed even a short time, I probably could have avoided the whole mess.

■ Be aware of lighting conditions and the importance of making no assumptions about a situation, consciously or otherwise.

■ Thank God for protective gear. Could my gear have been better? Sure. Leather doesn't transmit heat as readily as cotton (denim), so a leather jacket may have prevented the burn to my elbow. And a tighter-fitting jacket may not have hiked up and exposed the skin on my back, avoiding the road rash. I no longer wonder why motorcycle jackets all seem to have the built-in belt. That said, my protective gear had one vital feature. I was wearing it!

Does anyone know how wide the outermost taillight is on a '95 Dodge Intrepid? I make it out to be about 4 inches. Four lousy inches more, and I would've missed her.

In any case, the impact removed what little "control" I had — if you call laying a bike down a controlled maneuver. The impact canceled the lay down and substituted a high side fall, much worse than laying a bike down. This is where the rider goes off the top of the motorcycle, often leading to far more severe injuries.

In retrospect, I wish I'd had the presence of mind to wave to the nice people in the car as I flew past, but I was focused more along the lines of how much I really didn't want to be there. Fortunately, I never contacted the bike again; the rear end somehow swung back toward the car and

hit the left rear fender. Total damage to car, one taillight and one fender, which evidently sent it away from me with the rear ending up forward.

I ended up about 200 feet further in the on-coming lane with the wind knocked out of me. I was able to get up right away, dazed and slightly unnerved by the fact that I didn't seem to hurt all that badly — magic stuff, that adrenaline.

Other folks pulled up, and did the cell phone thing with 911. Remember, this was "The Middle of Nowhere," Kan., and operable cell phones may be the most remarkable thing of all. Emergency services showed up, etc., etc. No one in the car was hurt.

The neck brace/backboard action was a wise but, ultimately, unnecessary precaution. After zapping me with a Chernobyl equivalent of X-rays, the doc said the neck brace could come off and I could stand up. More X-rays, then the nurse, who up to this point had seemed to be a compassionate, caring human being, started cleaning me with a wire brush attached to a hydraulic press — or so it felt.

By far the most painful part of the whole ordeal was the scrubbing I got in the emergency room.

The Walking Wounded

Bottom line damage to me, in descending order of healing time:

■ **Broken right wrist**, distal ulnar styloid process — you know that bump on your wrist, it's the end of one of the bones in your forearm — got whacked right off.

■ **Beat-up right elbow** — badly bruised and second degree burned, yes, burned.

■ **Right shoulder** — doc tells me it was probably dislocated but reset itself (I really hope this is number three on the list and doesn't develop into some long-term weather forecasting device).

■ **Road rash on my back and right sides** — minor but painful.

■ **Both thighs bruised** — they hit and rotated the handlebars by 180 degrees.

■ **General aches and pains** — just about everywhere else.

Unanswered Questions

Why didn't I see brake or signal lights? Permit me to remind you of my description of the weather, the time of day and the direction of travel. The sun simply drowned them out. I mentioned that to the deputy who showed up at the hospital, and he chuckled. He said he'd walked up to the car at the scene to turn on the emergency flashers, only to find that they already were on.

Why didn't I see the intersection and, therefore, be prepared for a left turn? Well, the side street was a small, dirt and gravel farm road (Woodlawn Street believe it or not), behind a grassy field and a drainage ditch. Moreover, I suspect I was subconsciously biased not to look for it, since the southbound, right turn of the same street was offset to the west. I had just passed an intersection about a thousand feet or so ago, so I didn't think there could be an intersection there — a paradigm I'll fight in the future.

A metal snap on the helmet got ground down to its base, which sure beats grinding my frontal lobe.

I was wearing a heavy denim jacket, which didn't get ripped, so how did I get road rash and burned? Well, I've learned two painful lessons about riding jackets. First, get one that's tight around the waist; there's not much protection when it's bunched up under your arms. And secondly, nylon is a lousy material for an inside liner. As I slid on the asphalt with my elbow in contact with the surface, the friction was so intense that it melted the liner to my elbow.

The rest of my clothing did its job. I didn't even know I'd hit my head until the emergency medical technicians showed me my helmet. I'm sure glad that dent is in the kevlar and not in my cranium. And a metal snap on the helmet got ground down to its base, which sure beats grinding my frontal lobe. My belief in helmets has always been academic, but it's a bit more personal now.

The deer that volunteered its hide to make my gloves would be pleased to know that, while a good portion of that hide is no longer with us, the skin on my left hand is. The jacket and my boots just have a little character added to them. The helmet, the jeans and possibly the gloves are the only total losses.

If you're anything like my oh-so-caring-and-compassionate friends and co-workers, the next question is, "Yeah, but, how's the bike?"

Well, it looks like it's mostly superficial. The engine and frame seem undamaged, and the wheels appear true. Pretty much no damage to the left side. But any chrome do-dad on the right got vaporized, and the right saddlebag may be my next doormat. The insurance company will be buying me a new tank, rear fender, pipes, etc. It looks bad, but the bike should be healed before I am.

In any case, I came out of a potentially much worse situation with only one minor fracture plus some bruises and boo-boos. As I've been told many times since, I got away pretty lucky.

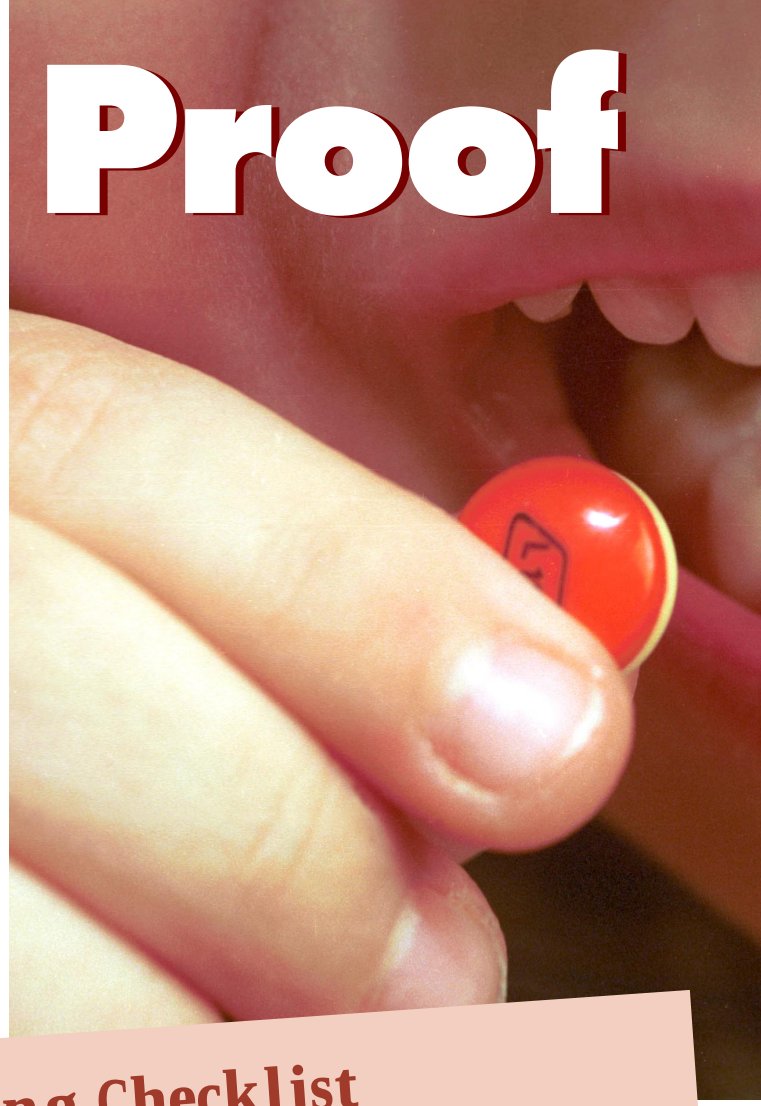
While that's very true, at least some luck I made for myself. The protective gear I wore did its job.

As a pilot, it's no fun being grounded with a cast on my arm. But as flesh-and-blood, I'm happy to be here to tell my tale — even if typing with a cast is slow work.

Captain Peterson is with the 349th Air Refueling Squadron at McConnell Air Force Base, Kan.

Poison Proof

Spring-cleaning can make your home, work and schools safer



Poisonings happen every day. Most poisonings happen in the home and involve children. In 1998 alone, more than 2.2 million human poison exposures were reported to poison control centers in the United States, and each year, nearly 900,000 visits to the emergency room occur because of poisonings. Ninety-two percent of the poisonings occurred in the home, and 53 percent involved children under the age of 6.

With March being Poison Prevention Awareness Month and March 20 being the first day of spring, it's a good time to do some spring-cleaning.

Common household items are often the cause of poisonings. The poisons usually involved are cleaning substances, pain relievers (analgesics), cosmetics, personal care products, plants, and cough and cold preparations.

When you are poison proofing your home, or taking a safety tour with young children, consider the below checklist of things to be concerned about. While this isn't an exhaustive list, it's a good starting point. It can be especially useful when talking with children to ask them to point out poisons. Use this list to get things rolling.

Poison Proofing Checklist

KITCHEN
- dish washing detergent
- liquid dish soap
- scouring soap
- window cleaner
- oven cleaner
- medicines
- vitamins
- furniture polish
- drain cleaner/opener
- ammonia
- alcoholic beverages

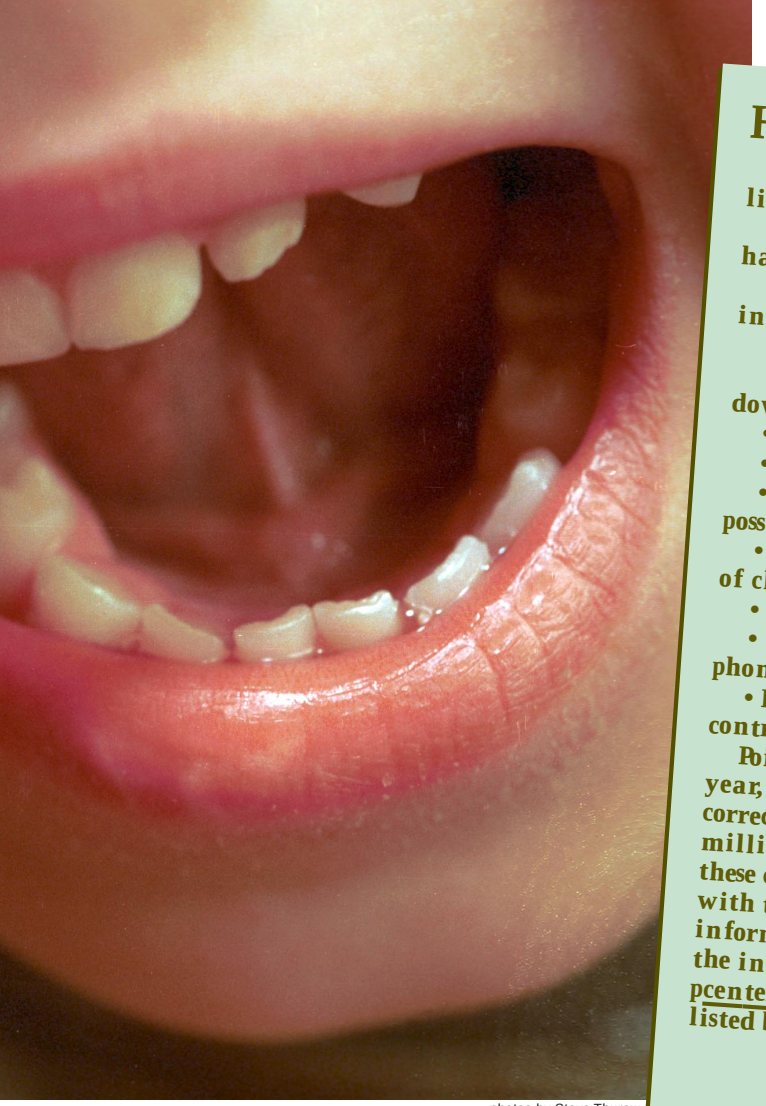
LAUNDRY ROOM
- laundry detergent
- bleach
- fabric softener
- dye
- stain remover

CLOSET/STORAGE SPACES
- rat/ant poisons
- moth balls & sprays

GARAGE
- gasoline
- kerosene
- car wax/soaps
- weed killer
- pesticides
- paint
- paint thinner
- windshield washer fluid
- antifreeze
- motor oil
- other lubricants

BATHROOM
- cosmetic products
- shampoo
- medications
- cleansers
- lotions
- perfume

PURSE
- medicines/pain killers
- cosmetics



photos by Steve Thurow

Helpful Hints

Here are some hints to help you poison proof where you live, work or go school.

- Install safety latches on all cupboards containing harmful products.
- Keep all products in their original container (not in pop bottles, cups etc.)
- Never refer to medicine as candy.
- Clean out old medicines frequently and flush them down the drain.
- Rinse empty containers and dispose of them properly.
- Never take or give medicines in the dark.
- Purchase products with child-resistant caps when possible.
- Store cleaning supplies out of reach and out of sight of children.
- Don't store medicines or cleaning agents near food.
- Keep poison control center, physician and hospital phone numbers readily available.
- Keep syrup of ipecac on hand; call your local poison control center, physician or hospital prior to use.

Poison control centers help millions of people each year, ensuring that poisonings are treated rapidly and correctly. Poison control centers managed more than 2 million cases of poison exposure in 1998. Three-fourths of these cases were managed at home over the telephone with the help of specialists trained in providing poison information. For your nearest poison control center see the internet site http://www.ipl.org/youth/poisonsafe/pcenters.html, where emergency phone numbers are listed by state.

— Information courtesy of the National Center for Injury Prevention and Control

What Affects a Child's Risk of Poisoning?

A host of risk factors affect a child's chances of being poisoned. Among children younger than 12, poisonings are slightly more common among boys than girls, and very few cases are classified as suicide attempts. Among adolescents, more than half of poison exposures involve girls. In addition, about half of all poison exposures among teens are classified as suicide attempts. A number of developmental and environmental factors also come into play.

Babies and Toddlers

Because of their limited motor skills and the close supervision they receive from parents, young infants have less of a risk of poisoning than their older siblings. But when children are about to celebrate their first birthday, they become mobile enough to open cabinets under sinks and reach objects on counter tops, and they can often open unsecured caps, bring containers to their mouths, and grasp and ingest small objects such as pills. Babies and toddlers are curious and love to put things into their mouths, but they don't know what's poisonous and what's safe to eat.

Preschoolers

Like toddlers, preschoolers aren't aware of the danger of poisoning, and they are likely to spend increasing amounts of time out of their parents' line of sight and supervision. Various factors – such as motor skills, cognitive ability and temperament – place some children at a greater risk of poisoning than others.

School-age Children

These children are beginning to develop the ability to recognize danger and to develop self-control, so they are at less of a risk of unintentional poisoning than are younger kids. With this group of children, however, inadequate supervision when the child must take medications can lead to an inadvertent overdose.

Adolescents

Suicide attempts – by intentionally taking an overdose of medication – are a risk factor among teenagers, with girls being more likely than boys to take an overdose of pills. Unintentional overdoses are also a risk, because of peer pressure to take drugs, easy access to drugs, and many teens' natural inclination to take risks.

– Courtesy of the American Academy of Pediatrics

Flying unde

Pilot juggles cockpit

Flying the AT-38 *had to be put on the backburner for Capt. Brian Gienapp, when his newborn son barely clung to life.*

r Stress

duties with home emergency

By Capt. **BRIAN GIENAPP**

On Sept. 19, I received a call that no future father wants to get. I was in a debrief between flights when I was informed that my wife was in labor ... three months early. The initial adrenaline rush was just the beginning of what would be a real life lesson in dealing with stress as a husband, father and pilot.

Hooked to a ventilator *so he could breath, Joshua, shown here at 4 days old, barely survived being born three months premature.*

My son, Joshua, weighed in at 2 pounds and needed the help of a ventilator to breathe. Born with sandy hair and brown eyes, he also came into this world with a hole in his heart.

Joshua was quickly med-evaced to a children's hospital two hours away, while my wife, Lisa, recovered from her emergency caesarian section. I also had my 1-year-old daughter, Katie, to care for at home. Thanks to a supportive supervisor and commander, I was able to spend most of the next two months at the hospital supporting my family, returning periodically only to update my flying currencies in the AT-38 at Sheppard Air Force Base, Texas.

During Joshua's hospital stay, we watched him go through a weight loss (down to 1 pound, 13 ounces), countless blood transfusions, and a failed intubation (putting a tube down his throat) that brought him within 30 heartbeats per minute from dying. Eventually he was strong enough to come home, but the professional challenge to balance my son's health issues and flying were just beginning.

Pressures to complete my instrument and mission checks were magnified by my recent lack of proficiency and my backlog of neglected paperwork. The heart monitor tracking my son's heart rate and breathing went off several times a night, leaving Lisa and me exhausted with little or no sleep and challenging my ability to stay focused (in the cockpit). We also learned how to use a pulse oximeter and supplemental oxygen to keep Joshua's oxygen saturation at an acceptable level.

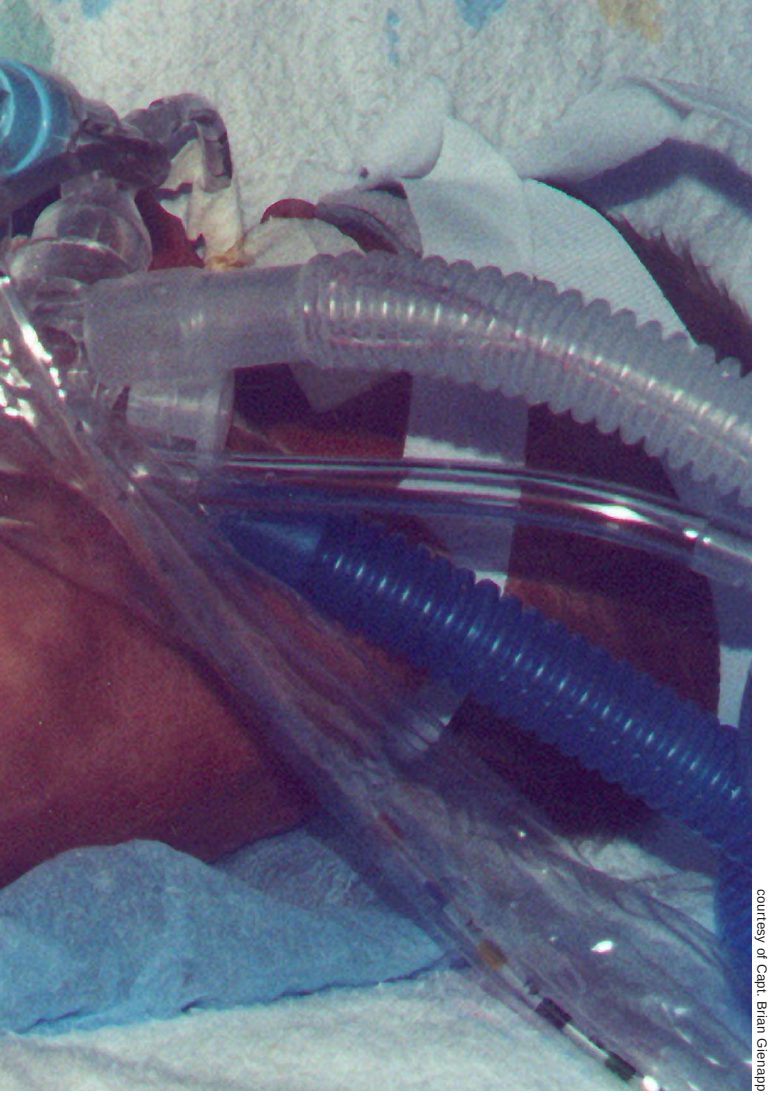
"The heart monitor tracking my son's heart rate and breathing went off several times a night ... challenging my ability to stay focused [in the cockpit]."

My stress level reached a point where it took a great deal of concentration on my part to put my son's health concerns aside and mentally prepare to fly. Even flying combat patrolling missions in the F-15 over Iraq hadn't challenged my stress limits like this.

Finally, the straw that broke the camel's back: I received news that Joshua might have an eye disease that would affect his vision and a call from my health care provider that they changed their mind about covering some of my son's medical equipment. At that point, I was unable to properly focus on safely flying the mission and, consequently, took myself off the flying schedule.

My real life education with stress and aviation had just begun.

In addition to dealing with Joshua's health issues and helping take care of the rest of the family, I used the time off to find that much has been written about stress and aviation. In his book "Aviation Safety — The Human Factor," Dr. Robert A. Alkov observed that pilots need to



courtesy of Capt. Brian Gienapp

understand the effects of stress, what particular stressors are affecting them, and what coping mechanisms we have to deal with stress while flying.

To understand stress, it's helpful to review how our bodies handle stress. When faced with stressors, humans have a fight or flight response where adrenaline is released in the blood stream, and blood is shunted from the stomach to prepare the body for action.

Unfortunately, for most modern day situations, both fighting and running away are inappropriate responses to stress; therefore, our opportunity to burn up energy released to the muscles simply isn't available. In addition, without the cleansing action of blood supplied to the stomach lining, stomach acids can attack and open the door for bacterial or viral infection. The body can adapt to this fight or flight syndrome, but if the stress isn't dealt with over time, you may face fatigue, illness or worse.

The stressors that cause this response are well documented and can result from different stimuli from our environment, interpersonal relationships and organization. In my case, they came from personal stressors, such as fatigue from private life stressors involving family health. An important side note, however, is that whether the stressor is pleasant or painful, it still requires coping.

Flight surgeons say that healthy coping skills start in the home with good rest, exercise and diet. Exercise especially helps rid our bodies of harmful chemical substrates produced by the fight or flight syndrome through increasing muscle metabolism. It also helps combat fatigue.

Four critical ways to help you

Cope with Stress

- ❑ **Exercise**
- ❑ **Get plenty of rest**
- ❑ **Eat right**
- ❑ **Have a support network**

– Dr. Robert A. Alkov
Author of "Aviation Safety – The Human Factor"

Also handy in beating stress is developing good friendship and support networks where you can gain insight and perspective. Organizational support is important, as supervisors can set the framework for allowing you to get back on your feet until you are able to contribute to the mission.

In my case, I was lucky to have the full backing of my chain of command in dealing with my son's issues. That helped me eliminate the risk of stress and distractions causing a flight mishap. And there was no negative fallout for me at work for taking the time I needed to care for my family. I also had a wealth of good friends and experienced pilots who had "been there before" to give me the advice and perspective that I needed.

Luckier still, Joshua is steadily improving. He has grown out of his lung disease, and the hole in his heart has closed. He's still resolving his eye disease, which has been slowly getting better. He is nearly 5 months old and just over 8 pounds and 18 inches tall.

By understanding stress, the stressors that affect you and good coping skills, you can be ready for your next real life lesson in stress. Fly safe!

Captain Gienapp is an AT-38 pilot with the 80th Flying Training Wing flight safety at Sheppard Air Force Base, Texas.

by Laura Kelly

The Gienapp's best present *was having Joshua home to spend Christmas with his parents, Brian and Lisa, and his older sister, Katie.*

A New 'Approach'

Radar system makes foul weather landings safer, easier

HANSCOM AIR FORCE BASE, Mass. (AFPN) — When the Air Force CT-43 jet carrying then-U.S. Commerce Secretary Ron Brown and 34 others crashed into a Croatian mountainside on final approach in 1996, the pilot was trying to land in foul weather. While not the only factor leading to the disaster, the lack of an adequate air traffic control radar system made such an approach too difficult.

The new mobile Ground Control Approach system, referred to as GCA-2000, should eliminate such problems. Procured by the Electronic Systems Center here and developed by the Gilfillan Division of ITT Industries, the system was recently delivered to Air Mobility Command.

"This mobile radar system provides our Air Force and our allies the ability to operate wherever we need to deploy and in virtually any weather," said Col. Bud Vazquez, global air traffic operations and mobility command and control systems program office director, whose staff managed the project. "Missions will be accomplished, and accomplished much more safely, as a result of this development."

The primary benefit is that it can be deployed easily and set up rapidly.

"That's definitely the niche this system has," said Chief Master Sgt. Scott Caldwell, the ESC program manager. "It can be shipped on a single C-130 (Hercules), and it can be set up by a small crew in less than three hours."

This permits air operations at any airfield that has serviceable runways, even if the facility doesn't have sophisticated fixed air traffic control radar in place and even if the field is frequently affected by inclement weather.

"A key improvement is no special equipment is required on the planes," said Maj. Justin Seiferth, chief of the program office's navigation and landing systems division. "Just about any kind of a plane will be able to land, as long as they have a radio.

A T-43, similar to the CT-43 that crashed and killed then-U.S. Commerce Secretary Ron Brown and 34 others, soars over San Antonio.

by Fernando Serna

USAF photo

A mobile radar system, the GCA-2000 will help deployed pilots land safely in virtually any kind of weather.

"Another great asset is the fact that it generates its own power, so it's not dependent on the power capabilities of the facility," Seiferth added.

What is unique about the GCA-2000, according to Caldwell, is the system is actually three radars in one. It's a mobile airport surveillance radar, which provides bearing and range information to controllers, and it's a secondary surveillance radar, which overlays flight code and altitude data on the controller's screen.

Additionally, the GCA-2000 is a precision approach radar, which provides split-screen information to the controller, according to Caldwell. The bearing and range are displayed on one half of the screen; elevation and range on the other. This enables the controller to give precise approach information to the pilot, allowing him to land safely when foul weather has reduced visibility.

Both the airport surveillance and the precision approach are Doppler radars, which detect weather systems and allow controllers to track their proximity to the approaching aircraft, Caldwell said. The displays also feature color-coded precipitation intensity displays, similar to what is shown on television weather forecasts.

Another key GCA-2000 feature is it allows operators to look at multiple runways with the same assets. According to Caldwell, the system can automatically align itself to the selected runway in less than a minute, an advantage earlier systems couldn't provide.

— Courtesy of Air Force Materiel Command News Service

Landing in Bad Weather

Most Air Force pilots practice their approach skills in good weather, which can lead to some bad habits. When you actually have to fly an approach in inclement weather, a bad habit can lead to disaster. The following are some of the many things that are important to do on every approach:

✔ Did you tune, identify and monitor (TIM) the navigational aid (NAVAID)?

✔ Are you using the current published approach? Check the terminal change notice (TCN), notice to airmen (NOTAMS), and automatic terminal information service (ATIS).

✔ Did you review the airfield diagram for runway layout, lighting systems and approach course alignment with the landing runway?

✔ Did you review missed the approach instructions?

✔ Questions? Consult Air Force Manual 11-217 V1.

– Maj. Jim Becker, AETC flight safety

Fatal T-37 Accident Investigation Complete

RANDOLPH AIR FORCE BASE, Texas (AETCNS) — Air Force officials have completed the investigation of a T-37 Tweet aircraft accident Sept. 6 at Vance Air Force Base, Okla., that resulted in the death of the pilot.

The accident investigation board found that while in the final turn for a touch-and-go landing, the aircraft appeared to be overshooting the inside runway, and the pilot rolled into a 70- to 90-degree bank to correct the overshoot. This steep bank exceeded the recommended 45-degree maximum angle of bank for a T-37. The bank, combined with low airspeed, resulted in the aircraft apparently stalling and immediately entering a spin.

Because of the low altitude of the stall and spin entry, the pilot couldn't successfully recover or eject before ground impact.

The board also found radio calls from the runway supervisory unit controller weren't standard for the traffic pattern and may have come too late to assist the pilot in recovering. It noted the pilot had lost some training continuity because of a recent illness.

The accident board was led by Brig. Gen. Quentin L. Peterson, 97th Air Mobility Wing commander, Altus AFB, Okla.

by Tech. Sgt. Lance Cheung

Engine Shutdown Caused Crash

RANDOLPH AIR FORCE BASE, Texas (AETCNS) — The Air Force has completed its investigation of the June 16 F-16C accident at Luke Air Force Base, Ariz.

The accident investigation found the student pilot inadvertently shut down the engine and was unable to restart it prior to approaching minimum safe ejection altitude. The student pilot ejected safely suffering only minor cuts and abrasions. The single-seat F-16 aircraft impacted in an isolated desert area 12 nautical miles southwest of Sells, Ariz., and was destroyed.

The student pilot was the wingman on an air combat maneuvering syllabus training mission. During aggressive aircraft maneuvering, the student pilot unintentionally pulled the throttle into the cutoff position. During several air-start attempts, the student was unable to achieve air-start parameters, and ejected at approximately 2,700 feet above ground level.

The accident investigation board found no defects with the aircraft and focused their findings on human factors and cockpit/crew resource management among the mishap student pilot and the flight instructor in an adjacent aircraft.

The accident investigation board was headed by Lt. Col. David G. Jowers, 80th Operations Group deputy commander, from Sheppard AFB, Texas.

'We Heard a Loud Thump'

by Steve Thurow

NELLIS AIR FORCE BASE, Nev. — When I was a younger troop, I was on a maintenance team that had been tasked to remove an aircraft engine that had experienced mechanical problems. The removal had been fairly routine, as we followed the technical orders closely. But as we rolled the engine from the removal/installation trailer to the transportation trailer, things began to unravel.

I went to cap and cover the electrical connectors and bleed air ducts in the engine bay. Two other maintainers finished up the final torque on the engine roller mounts and attachments. They did one final engine check to ensure everything was capped and plugged securely.

By this time, another maintainer and I had gotten back into the dispatch truck. Our shift supervisor, who was driving the truck, asked the other two maintainers if everything was secure. After receiving an affirmative response, he proceeded to drive away.

That's when we heard a loud thump.

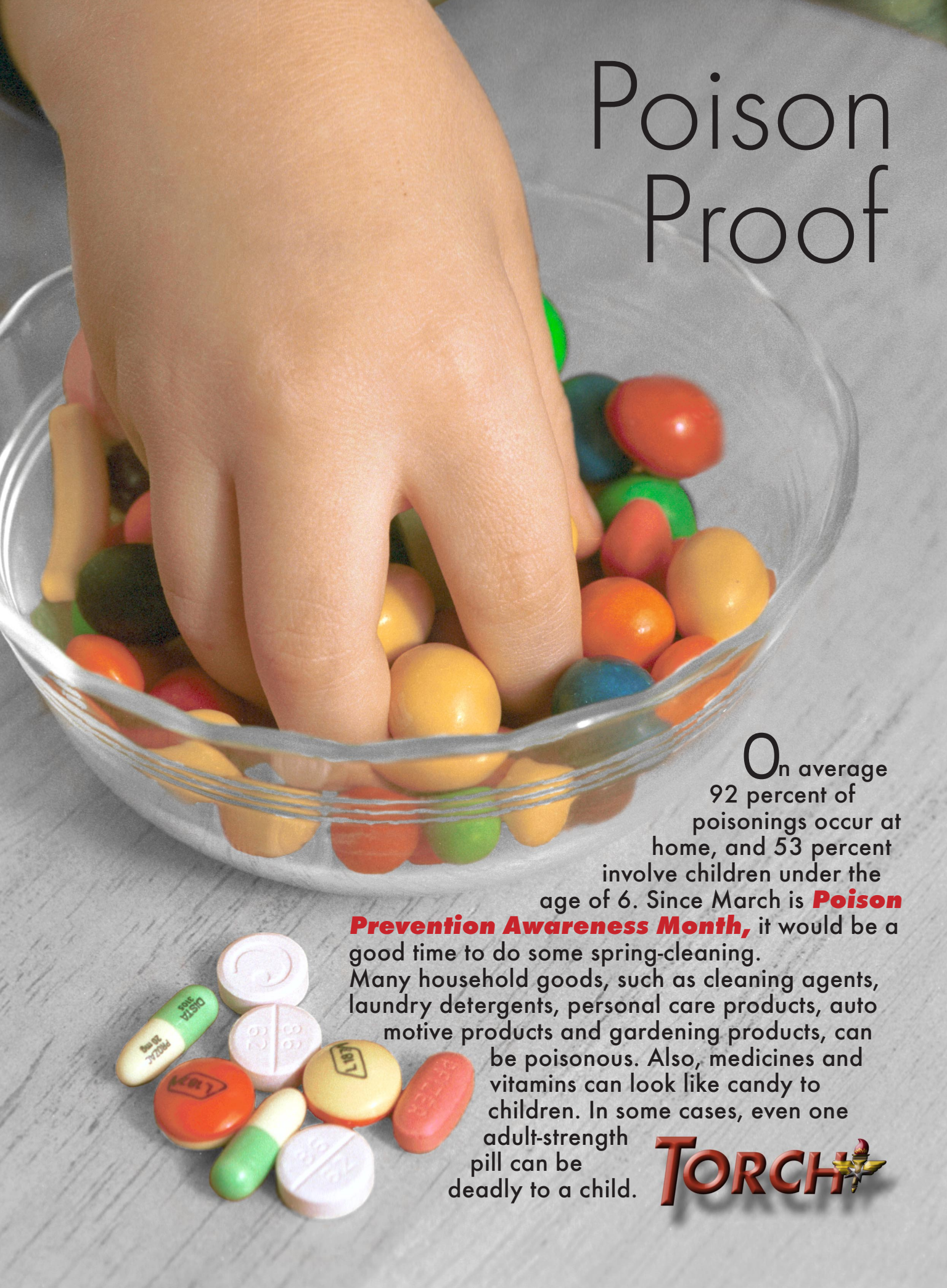
As I looked out of the rear truck windows, I could see the front of the engine, but something didn't look right about it. As we hastily jumped out of the dispatch truck, we could see that the engine had rolled back on the mount rails to the rear of the trailer. We were able to lift up the rear of the engine to inspect for any damage. It had minor damage to the exhaust area.

How could something like this happen? Well first, there was a lack of communication between the two maintainers who were responsible for securing the engine. They both should have informed the other about the roller mounts not being tightened — a major technical order violation. And even though we were working on another part of the engine, the other maintainer and I also should have checked the mounts.

One thing we all need to remember in the maintenance field is that we are a team. It doesn't hurt anyone to follow up and have a second set of eyes look at the finished product. Moreover, technical orders can't be violated! They are there for a reason. If you perform a task and conform to technical order standards, no one will ever question your maintenance practices. If you don't, you may be the next one to hear a "thump!"

— Master Sgt. Derick Hines, U.S. Air Force Thunderbirds

Poison Proof



On average 92 percent of poisonings occur at home, and 53 percent involve children under the age of 6. Since March is **Poison Prevention Awareness Month,** it would be a good time to do some spring-cleaning.

Many household goods, such as cleaning agents, laundry detergents, personal care products, auto motive products and gardening products, can be poisonous. Also, medicines and vitamins can look like candy to children. In some cases, even one adult-strength pill can be deadly to a child.

TORCH